The Year in Forestry

State and Private Forestry in the Northeast and Midwest

Fiscal Year 2011

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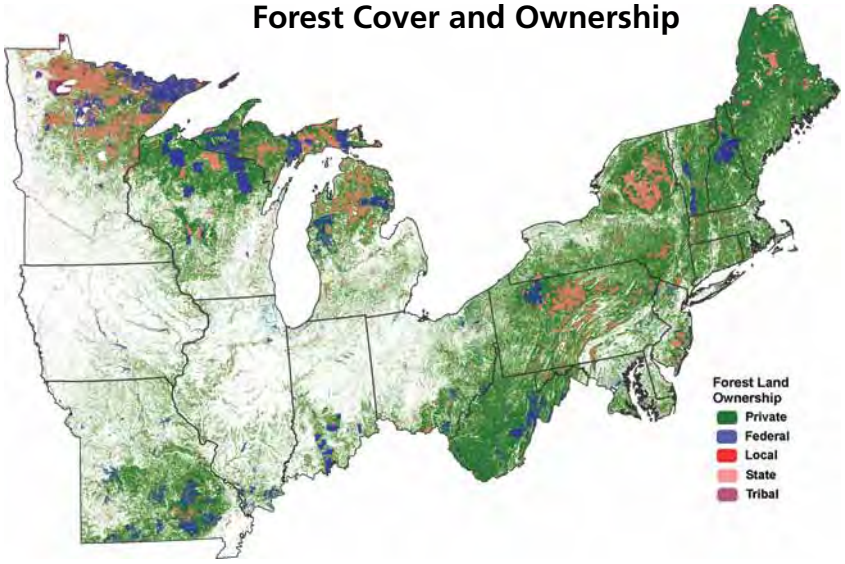
Executive Summary

The people of the 20 Northeastern and Midwestern States live with an abundance of forests. Despite having 9 of the 10 most densely populated States in the country, the region is the nation's most heavily forested, with 42 percent of its land area in forests. The region also has the top four most forested States percentage-wise, with Maine at 89 percent, New Hampshire at 85 percent, Vermont at 78 percent, and West Virginia at 78 percent.

Forest Cover and Ownership



The Northeastern Area State and Private Forestry serves 20 Northeast and Midwest States and the District of Columbia. Seventy-four percent of the forest land is privately owned (areas in green). (Click for larger map)

The Northeastern Area State and Private Forestry (NA S&PF) is the branch of the Forest Service, U.S. Department of Agriculture, that is primarily focused on the sustainability of non-Federal forest lands in the 20 States bounded by Maine, Minnesota, Missouri, and Maryland, including the District of Columbia.

NA S&PF supports the Forest Service's role as steward of the Nation's forests. Assisting landowners and communities in managing their forest resources helps to ensure that the region's private forests continue to yield public benefits.

Our mission statement defines our primary purpose: *Lead and help to support sustainable forest management and use across the landscape to provide benefits for the people of the 20 Northeastern and Midwestern States and the District of Columbia.*

The Northeast and Midwest States have—

- 41 percent of America's population.
- 32 percent of the nation's timberland area.
- 40 percent of the nation's forest-related jobs.

Selected Accomplishments, Fiscal Year 2011	Results
Forest Legacy Program	
Tracts protected	8
Acres protected	115,384
Acres protected (all years)	1,530,000
Forest Health Program	
Acres treated for gypsy moth	512,922
Acres surveyed and/or monitored	125,400,000
Cooperative Fire Program	
National Fire Plan	
• Hazardous acres treated, prescribed fire	48,071
• Hazardous acres treated mechanically	18,050
• Community Protection Plans delivered	263
Firefighters trained	29,610
Volunteer assistance grants to small communities	2,022
Community education programs conducted	1,849
Communities assisted through education programs	2,560
Forest Stewardship Program	
Technical assists to landowners	43,427
Acres owned by landowners receiving educational services	56,720
Acres under Stewardship Plans (all years)	10,321,191
Acres in new or revised Stewardship Plans	775,886
Percentage of new acres on priority lands	47
New or revised Stewardship Plans	9,809
Urban and Community Forestry	
Communities with management plans	2,814
People living in communities assisted	51,300,000
Urban Forestry Program cost per capita in communities assisted	$0.07
Volunteer hours contributed	766,627
Wood Education and Resource Center	
Projects funded	17
Value of funded projects	$1,200,000

Summary: Natural Resource Challenges and Results

Program	Program investments (millions)	Challenge or opportunity	Sample results and benefits
Urban and Community Forestry	$ 10.7 in FY 2011 $ 10.2 in FY 2010 $ 10.9 in FY 2009	• 9 of the 10 most densely populated States in the United States are in the region served by the Northeastern Area State and Private Forestry. • 20 million people live in communities that are not managing urban trees.	• 80.5 million people live in communities that are actively managing urban forest resources at a Federal cost of just $0.07 per resident. • The number of communities managing urban forest resources has risen by nearly 20 percent since 2007.
Cooperative Fire and National Fire Plan	$ 24.0 in FY 2011 $ 22.8 in FY 2010 $ 19.7 in FY 2009	• More than 62 million acres of land and more than 14 million homes are within areas classified as wildland-urban interface.* • More than 11,000 wildfires start in a typical year.	• 21,305 people were trained in the Incident Command System and wildland fire suppression. • 524 communities are at high risk of catastrophic wildfires are now covered by Community Wildfire Protection Plans.**
Forest Health Management	$ 30.4 in FY 2011 $ 30.3 in FY 2010 $ 28.4 in FY 2009	• 234 million forest acres are potentially at risk. • Threats from exotic pests include Asian longhorned beetle (ALB), emerald ash borer, hemlock woolly adelgid, and gypsy moth.	• Due to swift, coordinated action among the Forest Service and other Federal and State agencies, ALB was eradicated in Chicago and Jersey City, NJ. • The gypsy moth Slow-the-Spread Project has prevented environmental damage and financial losses on more than 90 million acres since 2000.
Forest Stewardship	$ 9.7 in FY 2011 $13.2 in FY 2010 $ 9.9 in FY 2009	• 3.9 million landowners are potentially eligible. • About 14 million acres are potentially eligible.	• State and private forest land under management has increased by 650,000 acres since 2008. • About 47% of the new acres with management plans in FY 2011 were in priority areas.
Forest Legacy	$ 32.3 in FY 2011 $ 27.3 in FY 2010 $ 27.2 in FY 2009	• 3.8 million forest acres were converted to nonforest uses or lost to development between 1982 and 1997.	• More than half of the funds used to protect lands have been from non-Federal sources. • 1.53 million acres have been protected since program inception.

**Wildland urban-interface: developed areas in close proximity to wildfire-prone lands*
*** National Association of State Foresters. 2009. Communities at Risk Report, FY 2008.*
www.stateforesters.org/files/NASF-finalCAR-report-FY08.pdf

The Region's Forests and People

The true strength of a Nation lies in its people and in the natural resources on which they depend.

The roughly 125 million residents who live in the Northeast and Midwest benefit from forests every day. Trees and forests help to protect drinking water supplies for 52 million consumers. Forests employ about 441,000 workers and yielded $112 billion in products in 2006. On the urban front, trees reduce storm water runoff, reduce temperatures on hot summer days, and shelter buildings from harsh winter winds. Not only do trees make urban environments more livable, they save money by controlling and cleaning storm water runoff, and by lowering energy costs for heating and cooling.

In the Northeast and Midwest, the majority of these forest benefits come from private land. Nearly three-quarters of the region's forests are privately owned. Owners range from large multinational corporations to forest industries to individual citizens. In fact, some 4.7 million family forest owners collectively hold more than 94 million acres of forest land, more than half the total forest acreage.

Forests in today's complex world

Forests are part of the solution to many of today's most pressing problems:

The high cost of storm water management: Trees, by intercepting and slowing excess water, reduce the need for expensive infrastructure. They are increasingly included in engineering plans. Planted along waterways, they hold the soil and help keep pollution out of the water.

The stress of everyday life: Nature offers a respite from today's multitasking, pressure-filled world. Recent studies show that simply viewing trees through a window improves worker productivity and helps hospital patients recover faster. Being outside is even better!

Renewable energy: Scientists are developing new ways to use wood as a source of clean, renewable, locally grown energy. "Fuels for Schools" is a particularly exciting trend in heating buildings and reducing costs, while improving forest health and creating jobs.

The economy: America's forests produce some of the world's finest wood products, boosting local economies. Tourism is a major source of revenue for most states—it's hard to imagine Vermont without its brilliant fall colors!

The region's forests are facing a number of threats. Global trade is delivering more uninvited forest pests, including three that could forever change the face of our forests and deal a serious economic blow to the region: the hemlock woolly adelgid, the emerald ash borer, and the Asian longhorned beetle. Each of these invaders targets tree species that are vital for wildlife and commercial uses. Invasive plants are also a growing problem; wildlife is threatened when these plants replace native species that provide habitat or food.

Although the rate of development rises and falls with the economy, the trend over time is clear. From 1990 to 2000, urban development overran 1.6 million acres of land, nearly 40 percent of which had been forested. As development expands, it often creeps into formerly rural areas that are close to wildfire-prone lands. More than 14 million housing units in the Northeast and Midwest now lie within areas classified as wildland-urban interface, which are at above-average risk for wildfires that threaten public safety, property, and natural resources.

Clearly, keeping critically important lands forested—and keeping those forests healthy—is vital to the region. At least three factors are important to success: (1) a planning and regulatory climate that supports forest land retention and management; (2) informed citizens who appreciate the value of forests, both urban and rural; and (3) a watchful eye on forest health and wildfires, coupled with a rapid response when things go awry. This is where the work of the Northeastern Area State and Private Forestry comes in.

About the Northeastern Area State and Private Forestry

The Northeastern Area State and Private Forestry (NA S&PF) is the branch of the Forest Service, U.S. Department of Agriculture that works to sustain non-Federal forest lands in the 20 Northeast and Midwest States. NA S&PF operates primarily under the Cooperative Forestry Assistance Act, as amended by the 2008 Farm Bill. In keeping with the Forest Service mission of ***Caring for the land and serving people***, our work covers a spectrum of activities.

We have a strategic plan that guides our activities, sets priorities, and helps us to work effectively and efficiently. It has two primary goals and an equally important management principle:

Goal 1: Promote sustainable forest management.
Goal 2: Enhance the capacity of forests to provide public benefits.

Management Principle: Provide effective public service.

The NA S&PF's strategic plan aligns with an internationally recognized set of 7 criteria and 67 indicators, commonly known as the Montreal Process, developed to monitor forest sustainability. The NA S&PF and Northeastern Area Association of State Foresters adopted these criteria and, working jointly, developed 18 base indicators to track trends in forest sustainability across the Northeast and Midwest. By tracking changes over time using the same measurements across the entire region, we can identify emerging issues and opportunities and set work priorities to address them effectively.

Working for Regional Results

The Northeastern Area State and Private Forestry (NA S&PF) works closely with partners, especially State forestry organizations. Partnerships allow us to adapt our programs to local conditions and position us to capitalize on needs and opportunities where and when they arise.

State Forest Action Plans

From Maine to Minnesota, south to Missouri and east to Maryland, States are taking action to protect and care for forests.

In 2010, every State forestry agency nationwide completed a Statewide Forest Resource Assessment and Strategy, known as a "Forest Action Plan." Prepared in cooperation with conservation groups, members of the public, and other stakeholders, the reports outline important State issues, opportunities, and actions, to ensure that forests continue to provide benefits to all Americans.

An amendment to the Federal Cooperative Forestry Assistance Act in the 2008 Farm Bill requires States to prepare these documents to be eligible for Federal forest-related funds. The main goal is to ensure that Federal and State programs target the most important needs and coordinate their work to achieve meaningful outcomes.

The NA S&PF assisted States throughout the process, as requested. We also prepared a regional summary of the Action Plans to share lessons learned, note data gaps, and to identify multi-State priorities. State Forest Action Plans and the regional-level summary are available at the National Association of State Foresters' Web site: www.forestactionplans.org.

Common themes in State Action Plans:

- Keeping forests as forests
- Forest health and productivity
- Urban and community forest health and sustainability
- Water, diversity of plants and animals, recreation, and other forest benefits
- Forest products industry and markets
- Climate change
- Wildfire threats to lives, homes, and forests
- State and private landowner capacity to participate in forest management
- Awareness of forest benefits and support for forest management

In addition, the NA S&PF …

- Provided GIS support to help States outline priority areas for the Forest Stewardship Program.
- Delivered one-on-one technical assistance across all programs.
- Used Forest Action Plan priorities to guide the allocation of competitive grants.
- Supported communications training and assisted with promoting State Forest Action Plans.

As part of the development of their Action plan, States identified blocks of land that have important environmental, social, and economic values. "Priority landscapes" typically span multiple ownerships and are focal points for collaboration. Beginning in Fiscal Year 2011, States started to use their Forest Action Plans to guide projects and activities.

Competitive Allocation Funding Process

In line with the 2008 Farm Bill, the NA S&PF began a new Competitive Allocation Request for Proposals (CARP) funding process in Fiscal Year 2011. The competitive process allocates funds to address issues and priority landscapes in State Forest Action Plans and in national and regional strategies. Besides targeting funds to priority areas, the new process improves program integration and reduces duplication in application and review processes.

The Fiscal Year 2011 CARP used a single process for three funding sources: State and Private Forestry Redesign, Forest Fire Hazard Mitigation, and Forest Health Management and Treatments. Because the one process solicits proposals for Forest Health, Fire, Hazardous Fuels Mitigation, Stewardship, and Urban and Community Forestry, applicants could mix or integrate State and Private Forestry programs, authorities, and funds to achieve priority outcomes.

A 13-member review team of six State foresters; the three NA S&PF Field Office Representatives, two Assistant Directors, the (then-acting) Director; and the Executive Director of the Northeastern Area Association of State Foresters ranked proposals based upon one set of criteria. As a result, NA S&PF awarded more than $14 million to support implementation of State Forest Action Plans.

Programs and Emphasis Areas

The NA S&PF offers technical and financial assistance through several programs and initiatives. Programs address local conditions, regional, and national priorities. The NA S&PF and the National Association of State Foresters work closely to ensure that programs meet needs and priorities outlined in the State Forestry Action Plans. The following section describes major programs and accomplishments. While programs are aligned with specific goals and objectives from the NA S&PF's Strategic Plan, many activities cross program boundaries as real-world problems often require multidisciplinary approaches.

Forest Legacy Program

To keep important forests intact, and to protect and manage them, is to provide a legacy for future generations.

Strategic Plan Goal 1, Objective A:
Conserve the biological diversity of high priority forest land at risk of conversion and fragmentation.

The Forest Legacy Program is a partnership between States and the U.S. Forest Service. States and partners identify important forest lands and protect them from loss to nonforest uses, most often through conservation easements. Lands that have special scenic or recreational value; water, fish, and wildlife (including threatened and endangered species); or ecological importance have the highest priority. All 20 States served by the NA S&PF have voluntarily joined the Forest Legacy Program.

In 2011, almost 115,400 acres of forest land in eight States were protected from conversion:

- *Green Horizons Phase VI, DE*. The sixth phase of a seven phase project added 377 acres to the Redden State Forest. It will continue to be sustainably managed for timber, helping to support the forest industry on the Delmarva Peninsula.
- *Hills of Gold II, IN*. Building on a Forest Legacy acquisition of 8 years ago, the project protects 158 acres of mixed hardwood forests that are certified by the American Tree Farm System and Forest Stewardship Council.
- *Metacomet Monadnock Forest, MA*. The first 5 tracts of a 14-tract project protected 453 acres in north central Massachusetts. When completed, more than 1,200 acres of forest will be conserved by the newly designated New England National Scenic Trail.

The Forest Legacy Program has protected more than 1.5 million acres of important forest land since 1993. Valued at over $525 million, the lands were conserved with a Federal investment of $252.5 million. States and other partners, including nonprofit organizations, provided the remaining funds.

- *Katahdin Forest Expansion, ME*. Two tracts totaling 7,910 acres, protected with a purchase and a conservation easement, will help guarantee a sustainable, long-term supply of wood to the mills in northern Maine.
- *Koochiching, MN*. Almost 76,250 acres were added to the 51,163 acres already conserved in this large-scale northern Minnesota conservation project. The forests are a key provider of timber to the paper mill in International Falls.
- *Hoxsie Farm, RI*. This project protects 117 acres of forest next to an earlier 471-acre Forest Legacy project. Both are located in the Pawcatuck Borderlands, one of the largest undeveloped areas along the southern New England coast.
- *Eden Forest, VT*. A 5,720-acre forest adjacent to a State forest and nature preserve creates a protected buffer along 4 miles of the State-wide Long Trail, including a popular stretch across Belvidere Mountain.

- *Wild Rivers, WI*. A 14,516-acre tract of sustainably managed high-value northern hardwood timber is part of the State's Wild Rivers Legacy Forest conservation initiative. The project adds to 64,600 acres that were already protected.

Landowner Assistance Programs

Forest landowners who commit to sustainable management provide benefits to us all. Moreover, they bequeath these benefits to future generations.

Strategic Plan Goal 1, Objective B:
Sustain the productive capacity of privately owned forest land

The Northeast and Midwest have more than 5 million private forest landowners. Their lands are critical to the region's environmental and economic health. The **Forest Stewardship Program** provides funds and technical support to State partners, who in turn work directly with private forest land owners and communities. To target limited resources effectively, each State develops a State Priority Plan, defining large forested areas that are especially important to manage sustainably. Landowners who sign up for the program work with a professional forester to set management objectives and write a Forest Stewardship Plan. The **Forest Land Enhancement Program** provides landowners with educational and financial assistance. Federal and State assistance help to ensure that landowners have the knowledge and the tools to manage their land sustainably.

Loss of forest land remains a key challenge. In a related issue, generation-to-generation transfers of family forest land have quickened as more of America's population ages. Heirs must often divide or sell the land.

In 2011, natural resources managers prepared more than 9,800 Forest Stewardship Plans covering in excess of 775,000 acres. More than 3.7 million acres within Important Forest Areas (State priority landscapes) in the Northeast and Midwest are being managed sustainably under a current Forest Stewardship Plan. Roughly 43,000 landowners received technical assistance, and over 56,000 landowners attended some type of educational program, workshop, or seminar.

The Stewardship Project

Keeping forests as forests—and managing them sustainably—yields public benefits such as cleaner water and air, recreational opportunities, forest products, and wildlife habitat.

Funding challenges—and the growing number of landowners stemming from the subdivision of land—are reducing State capacity to deliver programs by traditional means. The NA S&PF and the Northeastern Area Association of State Foresters have been working on a special 2-year initiative to find better ways to target assistance to priority areas and to improve management across large blocks of land. Workgroups of U.S. Forest Service experts and partners from State forestry agencies, Cooperative Extension, and nongovernment organizations provided input to the *Landscape Stewardship Guide* and its companion *Quick Start Guide to Landscape Stewardship*. The guide leads service providers through the steps needed to develop a Landscape Stewardship Project across multiple ownerships.

The Stewardship Project also led to new, voluntary measurements that will more effectively capture Forest Stewardship Program benefits across the Northeast and Midwest. Designed to measure both qualitative and quantitative impacts and values in each State, the information will allow the NA S&PF to better convey the value of the Forest Stewardship Program.

Baltimore-Washington Partners for Forest Stewardship

The Baltimore-Washington Partnership for Forest Stewardship was launched in 2006 with the signing of a Memorandum of Understanding. This Federal, State, local, and nonprofit partnership coordinates strategies to restore, conserve, and steward the combined landscape its partners manage within the Baltimore-Washington corridor. Partners collectively manage nearly 47 square miles of contiguous landscape, 64 percent of which is either in forest or wetlands. The NA S&PF's Chesapeake Watershed Forestry program helped to form the partnership and establish its objectives. The partnership invited the U.S. Forest Service to formally join it in 2011, even though we do not manage land in the corridor. More information on this partnership is available at the Partners' Web site.

Forest Health Protection Program

Healthy forests and trees are vital to our well-being. Regular monitoring is essential to protecting forest health.

Strategic Plan Goal 1, Objective C:
Maintain the health and vitality of forest ecosystems at risk from potentially damaging agents.

Forests are exposed to pests, extreme weather, wildfires, and pollution. While we cannot always protect trees from stresses such as these, swift action can limit their impact.

The Forest Health Protection Program offers specialized expertise and financial assistance to States and Tribal lands, and National Forests and other Federal lands. State forestry or agriculture agencies in turn serve private lands. Annual pest detection surveys across ownerships, completed with States and the District of Columbia, help to identify forest threats early.

Forest Health Protection Highlights

St Paul, MN, Field Office

- Developed aviation management plans and flights for all aerial detection surveys.
- Assisting with a project in Michigan's Upper Peninsula to test whether treating small isolated emerald ash borer infestations will slow ash mortality. Besides providing valuable information, the project is employing people for field work in an economically depressed area.

Morgantown, WV, Field Office

- Offering technical and financial assistance in the rearing and release of biological control agents for hemlock woolly adelgid.
- Providing technical support to an emerald ash borer project in Fayette County, WV, in cooperation with the USDA Animal and Plant Health Inspection Service scientists.
- Assisted Federal and State plant pest regulatory agencies responding to a newly detected Asian longhorned beetle infestation in Claremont County, OH.

Acres surveyed for forest health problems in 2011:

Federal	20,421,832
Private/State/Local	104,995,750
Total	**125,417,582**

Durham, NH, Field Office

- Completed the first description of Asian longhorned beetle forest infestation patterns and behavior in northeastern forests after the insect was found in Massachusetts.
- Used Digital Aerial Sketch Mapping for on-the-ground surveys in Worcester and Monson, MA. The data were used to assess the condition of existing trees in the aftermath of a June 2011 tornado, after an Asian longhorned beetle eradication, and to identify where new trees could be planted. Specialists provided training on using the mapping hardware and helped produce maps that the cities will use to restore their urban forest.

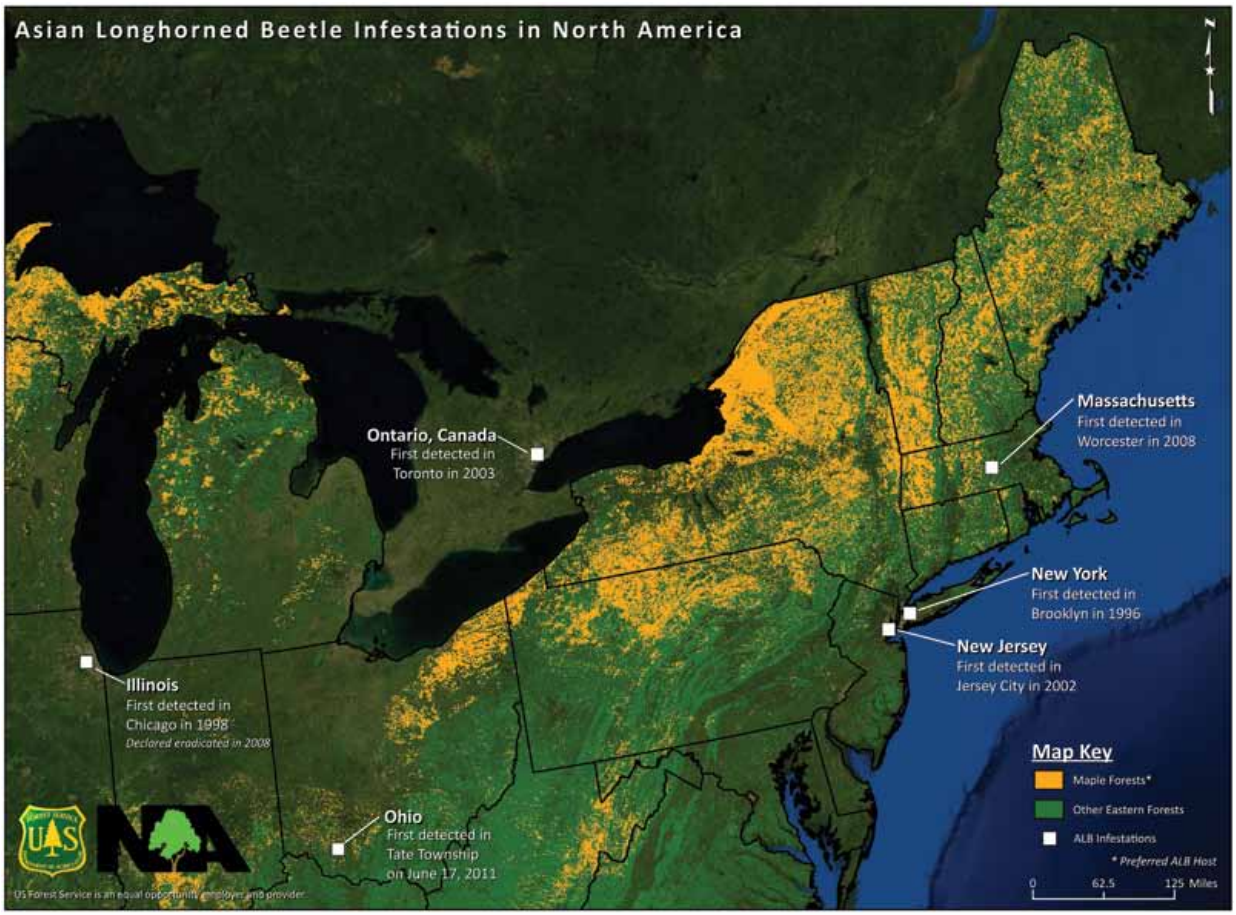
Disease Recently Discovered in the Northeast

During summer 2011, a Bucks County, PA, landowner reported that many of his walnut trees were declining or dying. Eastern black walnut is among the most valuable tree species, producing high quality wood and nuts. Specialists began visual surveys in and around Bucks County. They soon linked the problem to the walnut twig beetle and a canker-causing fungus, known together as thousand cankers disease. This is the first find reported in the northeastern United States and the third known infestation in the Eastern United States. The disease may have arrived in a shipment of trees the landowner received from the west coast 6 years ago.

Pest-Specific Highlights

Asian Longhorned Beetle

- Declared the beetle eradicated in Chicago and parts of New Jersey after sustained, coordinated action by Federal, State, and local agencies, including NA S&PF.
- Completed a study on beetle colonization of three forest-grown maple species.
- Continued a regional survey and public outreach in New England and the Mid-Atlantic States for the beetle and other invasive tree pests in cooperation with the USDA Animal and Plant Health Inspection Service, and State forestry and agriculture agencies.
- Customized Forest Service beetle information products for cooperators.
- Participated on the beetle Management Board.
- Conducted a beetle trapping study with Penn State University, using the data to modify the regulated area in Worcester, MA. If traps can be perfected they will lower the cost of surveys and improve the ability to detect infestations.
- Evaluated beetle biology in infested forests around Worcester, MA, and recommended ways to improve surveys in nonregulated forested areas.



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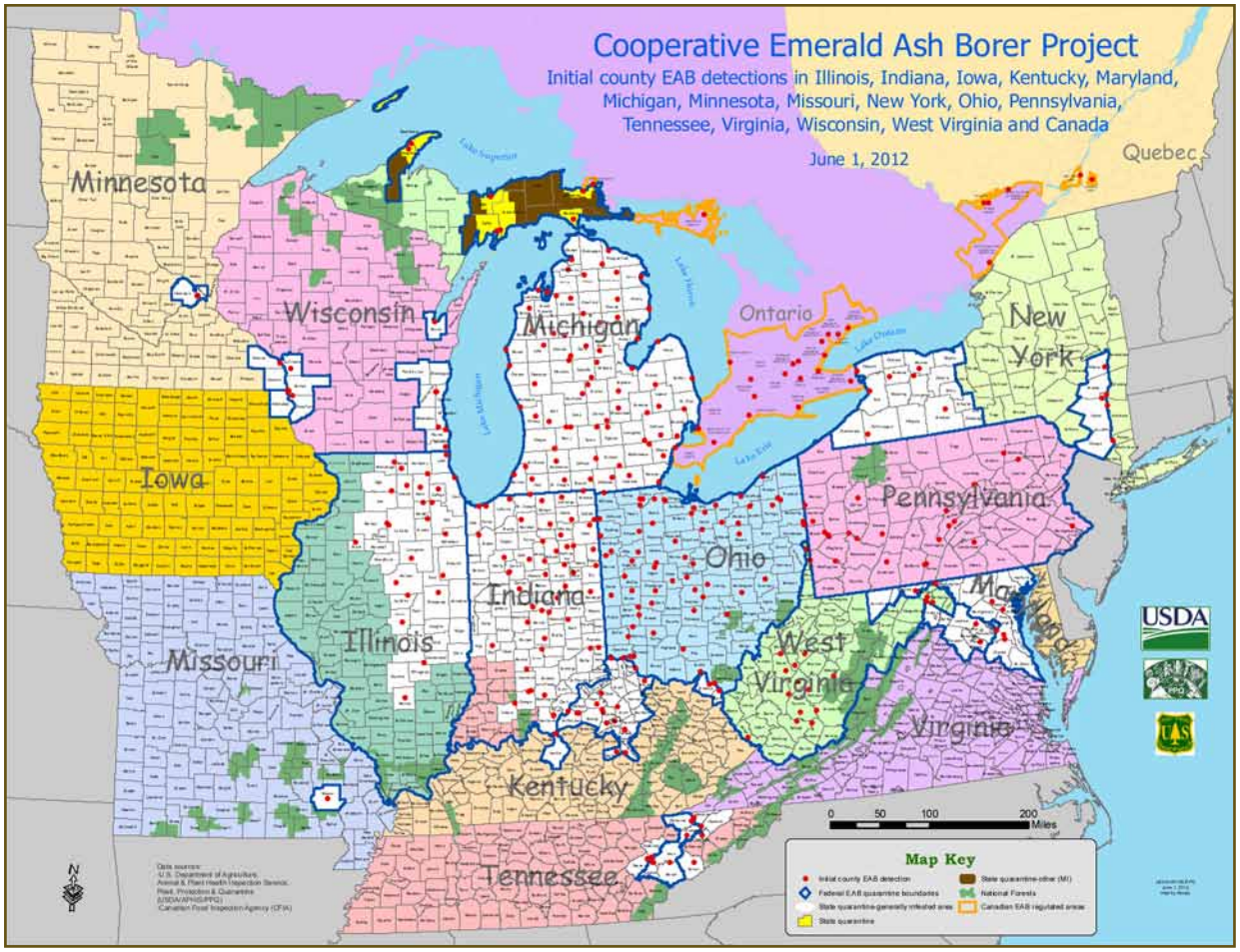
Emerald Ash Borer

- Began ash inventories at high-value recreation sites on three National Forests as a first step towards possible preventive treatments.
- Started a seven-State effort to prepare for, detect, and suppress the borer in the Northeast.
- Supporting borer management in the Western Lake Erie Basin, OH: helping communities and forest landowners remove infested trees, restore affected areas, use ash wood, manage forests, and restore areas along waterways.
- Assisting State and local partners in replanting affected urban lands in Illinois, Michigan, New York, Ohio, and Wisconsin.
- Studying how emerald ash borer spreads, chemical and biological controls, survival in wood chips and firewood, and survey techniques in cooperation with universities.



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Hemlock Woolly Adelgid

- Released hemlock woolly adelgid predators in 19 locations in Maine, Maryland, Massachusetts, New Jersey, New Hampshire, and West Virginia.
- Collected more than 8,000 adelgid predators from established sites and released them in other infested areas.
- Continued to produce *Laricobius nigrinus* predators for release.
- Completed eastern hemlock cone collection in Massachusetts and Maine to preserve genetic material.
- Launched a hemlock health initiative in Maine, New Hampshire, and Vermont to coordinate survey and monitoring, release of biological controls, chemical treatments, treatment evaluation, and public outreach.
- Assisted Federal, State, and Tribal land managers in Massachusetts, Michigan, New Jersey, Pennsylvania, and West Virginia, in eradicating or suppressing adelgid infestations.

Gypsy Moth

Gypsy moth populations generally remained low throughout the region.

- Treated 3,100 acres with microbial insecticides in New Jersey and Wisconsin, preventing insect damage.
- Treated about 2,300 acres in Minnesota and Wisconsin, eliminating isolated populations.
- Treated about 526,000 acres in the Slow-the-Spread action area, most with a gypsy moth-specific product.
- Applied a new mating disruption product after 2 years of development and 5 years of field evaluation. Market competition between the standard and the new product brought prices down.
- Placed 90,000 pheromone traps to monitor gypsy moth populations.

Gypsy moth traps are used to monitor infestations.

Wood Education and Resource Center

Trees, ancient sources of energy and building material, are still an earth friendly, renewable option for the 21st century.

Strategic Plan Goal 2
Objective 2A: Promote and encourage the viability of forest-based industries
Objective 2B: Help the Northeast and Midwest to meet their needs for renewable energy, to reduce greenhouse gases, and to conserve energy

The Wood Education and Resource Center (WERC) promotes sustainable wood processing and the use of woody biomass across the 35-State eastern hardwood region. WERC offers sought-after technical expertise, training, and information to businesses, States, and other partners. Information topics include efficient wood processing, using pest-damaged timber, green building, and wood-based energy. WERC also helps wood industries recruit, train, and retain skilled managers and employees.

American hardwood manufacturers are struggling to remain competitive in the face of global competition and high operating and energy costs.

In 2011, WERC facilitated a Forest Service investment of about $1.2 million in 17 projects. Activities were aimed at helping businesses use their resources more efficiently and encouraging sustainable use of woody biomass. Projects helped keep Americans employed and kept forests as forests by providing income to offset landowner costs. Forests that provide a stable long-term source of income are less likely to be subdivided or sold for other uses.

WERC continues to promote the use of wood as a renewable source of heating and fuel. The WERC Woody Biomass Technical Assistance Team (see Success Stories in this report) provided numerous facilities, such as schools, hospitals, and other institutions, an overview of the potential financial benefits of using wood for energy, and for combined heat and power. Of particular note is assistance provided to Missouri's Fuels for Schools Project.

WERC is also focusing on uses and harvesting methods for urban and suburban trees that are removed to halt the spread of diseases and insects, such as emerald ash borer, or in the aftermath of natural disasters. Partners such as the Southeast Michigan Resource Conservation and Development Council and the Illinois Emerald Ash Borer Wood Utilization Team are using demonstrations, training, and feasibility assessments to highlight innovative ways to use this woody material.

Cooperative Fire Protection Program

The cornerstones of an effective wildfire program are prevention and a rapid firefighting response.

Strategic Plan Goal 2, Objective 2C
Help communities at risk from wildland fire protect lives, property and natural resources.

The severity of wildfires varies from year to year and region by region, but the greatest challenges remain the same: reducing wildfire risks and being ready to respond when a wildfire strikes. Because roughly 40 percent of the U.S. population lives in the 20 Northeastern and Midwestern States, nearly all forest fires in the region affect people and most threaten homes. By contrast, many fires in the more sparsely populated western U.S. burn for weeks without threatening communities or homeowners.

More than 5,400 reported wildfires burned 173,801 acres across the Northeast and Midwest. In this region, State agencies and local fire departments fight most wildfires in cooperation with Federal agencies that include the U.S. Forest Service, the National Park Service, the U.S. Fish and Wildlife Service, and the Bureau of Indian Affairs. Interagency cooperation and coordination at all levels is essential to stop a wildfire from spreading, to reduce resource losses, and to protect public safety.

The Cooperative Fire Protection Program stresses prevention and—when wildfires strike--a rapid, aggressive response to keep fires small. The program has several components.

Fire Program Components

State Fire Assistance offers grants and technical assistance to States and local fire organizations to boost wildland firefighting capacity, reduce fire hazards by actions such as removing excess fuels, target programs to hazardous areas, acquire small equipment, and conduct prevention and education activities to improve community protection.

Volunteer Fire Assistance targets cost-share grants specifically to communities with fewer than 10,000 people. Funds help recipients acquire fire and safety equipment, train volunteer firefighters, and organize new departments in unprotected communities.

Under the **Federal Excess Personal Property (FEPP)** and **Firefighter Equipment (FFP)** Programs, the NA S&PF obtains millions of dollars in firefighting equipment per year. Trucks are then loaned (FEPP) or the title is passed (FFP) to State forestry agencies, which in turn often provide them to local fire departments.

Aviation Management supports the use of fixed-wing aircraft and helicopters in firefighting and other natural resource missions. The program provides safety inspection and oversight for projects that use FEPP aircraft and manages aviation missions for forest damage assessments, aerial photography, and pesticide applications.

Forest Fire Compacts are fire-protection agreements among U.S.States and Canadian provinces that pledge assistance to one another in the event of a catastrophic wildfire. Four active compacts together cover all States in the region: the Big Rivers Compact, the Great Lakes Compact, the Northeastern Forest Fire Protection Commission, and the Mid-Atlantic Compact. The Cooperative Fire Protection Program provides grants and technical assistance to support their activities. Compacts save tax dollars by reducing the number of staff and equipment a State or Province must maintain year-round.

Congress first funded the **National Fire Plan** in Fiscal Year 2001 to provide additional resources for reducing hazardous fuels, controlling wildfires, restoring burned landscapes, and assisting communities.

Accomplishments

State Fire Assistance Program

The 20 States served by the NA S&PF received more than $5 million in grants to:

- Help train State forest fire personnel
- Purchase new wildland fire equipment
- Upgrade automated weather stations that provide critical data for predicting fire occurrence and behavior

Volunteer Fire Assistance Program

The NA S&PF, cooperating with State forestry agencies:

- Trained more than 8,300 volunteers in the Incident Command System and wildland fire suppression
- Assisted in the formation of eight new fire departments
- Provided assistance to close to 3,300 fire departments
- Awarded grants totaling $3.8 million to over 2,000 departments

Federal Excess Personal Property Program

In 2011, $32.9 million in firefighting equipment was loaned to State and local agencies for fire protection. The NA S&PF transferred ownership of $33.7 million in equipment to eight States in Fiscal Year 2011. More than $228 million worth of equipment, primarily trucks and some aircraft, is currently on loan to State and local firefighting agencies.

Aviation Management

No aviation accidents were reported in 2011. All contract and State aircraft were inspected and aviation equipment standards were maintained, supporting safety on all air operations.

Forest Fire Compacts

The forest fire compacts conducted two wildfire academies and helped sponsor numerous activities. Relations with Canada were further strengthened via the compacts, especially in the Northeastern Forest Fire Protection Commission, where the Province of Newfoundland-Labrador has recently joined New Brunswick, Quebec, and the New England States. In 2011, the Canadian province of Manitoba provided air support to Minnesota under the Great Lakes Forest Fire Compact.

National Fire Plan

National Fire Plan funds were used to enhance wildland firefighting preparedness and to reduce wildfire risks to communities:

- Using prescribed fire reduced hazardous fuels on 118,480 acres near at-risk communities
- Reduced hazardous fuels on more than 18,000 acres, by mechanical means
- Delivered over 500 community protection plans, risk assessments, or equivalent
- Completed over 1,800 prevention and community education programs

In addition, another 1,778 communities benefited from a variety of programs, including:

- Special training
- Enhancing rural water supplies to put out fires
- Completing defensible space and Firewise activities in high priority watersheds

Across the region, 723 communities are now at reduced risk from wildland fires.

Urban and Community Forestry Program

A community that cares for its trees invests equally in its people.

Strategic Plan Goal 2, Objective D:
Maintain and enhance the benefits communities within metropolitan areas derive from their forests and trees.

Studies show that citizens who get involved with managing their natural environment feel a greater sense of community. Towns and cities that invest in trees and green spaces benefit from cleaner air and water, diverse opportunities for recreation and spiritual renewal, and a more vibrant economy.

The Urban and Community Forestry Program provides technical and financial assistance to communities for forest inventories, assessments, planning and policy development, education, public awareness, and tree planting and maintenance.

Program Goals:

- Support citizens as they enhance nature to improve their economic, social, and environmental well-being.
- Encourage "smart growth" that minimizes the loss of trees and forests.
- Implement monitoring and management practices that contribute to urban forest health.

The NA S&PF fosters awareness of the social, environmental, and economic benefits from trees and forests that all people enjoy, including better air and water quality, energy conservation, public health and safety, education, jobs, and resilience to the impacts of climate change. Focus areas include invasive pests and severe weather.

State Forest Action Plans emphasize the value of *green infrastructure*: trees and open space essential to quality of life and the environment in and around cities, suburbs, and towns. Most States favor an integrated, three-pronged strategy of protecting existing tree cover, setting best management practices, and engaging local officials and the public in planning, sustaining, and improving forest resources.

More State forestry agencies are requiring that communities set urban tree canopy goals to participate in grant programs. The Indiana Department of Natural Resources assessed the tree canopy in more than 100 communities and found that it ranges from 12 to 48 percent. The State is targeting tree planting resources in areas most lacking in canopy cover.

In Fiscal Year 2011, the Northeastern Area State and Private Forestry and the State Foresters assisted more than 4,000 communities, improving the environment and quality of life for 80 million residents.

Tornado Response—Missouri and Massachusetts

In 2011 tornados struck Joplin and Duquesne, MO, on May 22 and west central Massachusetts on June 1, causing heavy damage and loss of life. The NA S&PF provided aerial images of forest damage to responding agencies. We also coordinated with State and other partners to provide training and to assess hazards from the trees left standing. In Springfield, MA, the Urban Forest Strike Team identified more than 2,000 tree planting sites in damaged areas. Information allowed officials to respond to needs more quickly and to target available resources to areas of greatest need.

Green Collar Jobs—District of Columbia, Milwaukee, Detroit, and Baltimore

Through pilot programs, The NA S&PF provided funding to help nonprofit and municipal organizations hire interns. The new workers gained hands-on experience in all aspects of urban forest and street tree management, community outreach, and education. The City of Milwaukee recruited and trained diverse candidates in urban tree management, leading to their certification and employment in commercial enterprises.

The NA S&PF is responding to the need for jobs and providing a way for under-employed adults to enter the environmental workforce.

Early Detection and Invasive Pest Management

Across the region, we are helping communities with assessing their urban forest's vulnerability to invasion by insect pests and with managing trees to mitigate impacts on both public and private property. Two tree-killing foreign pests, the emerald ash borer and Asian longhorned beetle, are of special concern.

This year the NA S&PF developed and released i-Tree Pest Detection software, allowing communities to identify signs and symptoms of pests during tree surveys. The City of Detroit began the largest field test to date of this important new urban pest detection protocol. In addition to i-Tree, a newly developed framework allows users to target at-risk communities and involve residents in survey and reporting activities. Both tools will improve the ability to discover and respond to invasive pests before they become unmanageable.

Green Infrastructure and Watershed Action

We have learned that establishing and maintaining "green infrastructure" helps to reduce the cost of managing storm water as it meets other environmental, social, and public health goals. Projects to remove pavement and plant trees in schoolyards and parking lots, coupled with expanding planting strips to absorb water during storms, have caught the attention of planners and engineers. A study by the Mid-America Regional Council in Kansas City, MO, estimated that current street tree cover intercepts 605 million gallons of rainfall per year, saving the city more than $16 million annually in storm water management costs. Planting all vacant tree spaces would intercept an additional 176 million gallons, saving another $4.7 million annually.

Featured Projects

To make a difference in programs that span political boundaries and diverse natural environments, the NA S&PF forges strong partnerships with States and others. Together we decide how and where to invest resources so that locally important projects also support national and regional priorities.

Each year, the NA S&PF selects projects for special emphasis. Sometimes these projects reflect a short-term need, but more often they unfold over a longer period of time. Featured projects have one or more of the following characteristics:

- Target a critical problem or opportunity in a specific geographic area
- Span a region or multiple States
- Foster local participation from citizens and governments
- Demonstrate new approaches or technology with an opportunity to share results with a regional or even national audience
- Involve nontraditional partners
- Pool resources and expertise, leading to greater efficiency and potential cost savings
- Need multidisciplinary involvement to be successful
- Represent a significant commitment of resources and expertise

Following are abstracts for initiatives that were featured in Fiscal Year 2011.

Climate Change and Ecosystem Services

Forest benefits are often undervalued in traditional accounting—or left out entirely. The NA S&PF is leading and coordinating efforts to mitigate climate change through forests. We support development of economic value and true-cost accounting methods for forest-related environmental services, and fund competitively selected climate change projects.

Specific activities include these:

- Developing the Strategic Framework for Responding to Climate Change.
- Creating a framework to engage non-Federal landowners.
- Working with the U.S. Environmental Protection Agency to facilitate the development of sustainable payments or markets for ecosystem services in the Great Lakes Region.

Asian Longhorned Beetle Eradication—New Infestation Threatens New England Forests

Asian longhorned beetle (ALB), which is fatal to maples and other species, was found in New York City in 1996 and later in Chicago; New Jersey; Toronto, Canada; Staten Island, New York; and most recently Massachusetts. Eradicating ALB will take a long-term commitment of time and money, but the value of preventing resource and economic damages will far outweigh the cost. The USDA Animal and Plant Health Inspection Service is the lead Federal agency.

Due to swift, coordinated action and support among the Forest Service and other Federal and State agencies, the beetle was eradicated in Chicago and Jersey City, NJ. Forest Service support includes:

- Removing infested and high-risk trees, insecticide treatments, and replanting trees,
- Seeking a beetle attractant to reduce high survey costs,
- Using U.S. Forest Service smokejumpers for in-crown surveys for the beetle, and
- Coordinating regional surveys and public outreach in New England and the Mid-Atlantic States, including developing Forest Service ALB information products customized for cooperators.

Emerald Ash Borer

The emerald ash borer, an Asian insect that kills ash trees, appeared near Detroit in 2002; then in Ontario. It has since been found in 15 States. Removing and replacing infested trees could cost communities and homeowners more than $10 billion over 20 years; however, the value of at-risk trees in urban and forest settings tops $300 billion.

The Forest Service supports the lead Federal and State plant pest regulatory agencies, develops tools and technology, and assists communities and landowners that have lost ash trees. Recent activities include:

- Developing and testing early detection tools, chemical or biological controls, and studying how the insect survives and spreads.
- Providing technical and public information; cosponsoring a heavily visited portal Web site.
- Conducting zip code-based surveys in 10 States.
- Assisting State and local governments with replanting at affected urban sites.
- Implementing emerald ash borer management in six States and monitoring in two States, in cooperation with State partners.
- Completing the second season of the SLow Ash Mortality (SLAM) project in Michigan's Upper Peninsula. This multi-agency pilot could lead to a national management strategy.

National Gypsy Moth Management Program

Gypsy moth infests 19 Eastern States and the District of Columbia, defoliating trees on more than 91 million acres since 1924. A national environmental impact statement guides response to gypsy moth and outlines three strategies: reduce the damage from outbreaks in the generally infested area (suppression), eliminate scattered infestations outside the generally infested area (eradication), and reduce spread into currently uninfested areas (slow the spread). The Forest Service coordinates gypsy moth activities with the USDA Animal and Plant Health Inspection Service and others.

Hemlock Woolly Adelgid Initiative

The hemlock woolly adelgid, a nonnative insect, has been found in 17 States. It could infest the entire range of hemlock in the next few decades. Individual trees can be treated successfully, but the method is not practical or affordable in forests. Natural enemies tested at release sites are promising, but it will be several years before their populations are large enough to significantly affect the adelgid.

The hemlock woolly adelgid strategic plan guides an integrated program among cooperators and nongovernmental organizations, assisted and supported by the National Association of State Foresters and the National Plant Board. Recent Forest Service activities include:

- Releasing adelgid predators in six States and assisting with suppression and eradication in four States
- Developing a plan to preserve genetic material from hemlocks to aid in the search for natural resistance to the adelgid
- Completing field evaluations for aerial application of an adelgid-killing fungus that could be used on forests

National Gypsy Moth Management Program—Reducing Damage and Slowing the Spread

- The gypsy moth Slow-the-Spread Project targets scattered colonies along the advancing front in 11 States. It reduces damage by suppressing outbreaks and eradicating isolated breakouts in new areas, thereby slowing the spread.
- The project has reduced the gypsy moth rate of spread by 60 percent, from an average of 13 miles per year to fewer than 5 miles per year, preventing environmental and economic damages on 90 million acres since 2000. Delaying new outbreaks yields a benefit-to-cost ratio of better than 3:1. Over the next 20 years, Slow the Spread is expected to prevent infestation of more than 150 million acres.

Invasive Plants—Rapid Response and Cooperative Weed Management Areas

The NA S&PF began its nonnative plant initiative in 2003, naming key contacts in each field office. The program emphasizes information management, biological control, and capacity building.

Early detection and rapid response are critical to finding invasive plants before they overrun native species or spread to sensitive ecosystems. Cooperative Weed Management Areas—defined areas where partnerships are formed to battle noxious plants—are fostering cooperation and coordination and helping to build response capacity. Across the region, 43 areas have been formed with more added each year. About 17,000 acres of invasive plant infestations were treated in Fiscal Year 2010.

Thousand Cankers Disease of Black Walnut

In 2010, declining and dead black walnut trees were discovered near Knoxville, TN. Two pests that occur together, a walnut twig beetle and a fungus thought to be native to the Southwestern United States, produce cankers that begin to merge after repeated attacks. Experts are studying the pests in order to develop effective treatments and a standardized early detection survey protocol. Otherwise, Eastern black walnut could disappear from its native range.

The NA S&PF cohosted the first national symposium on thousand cankers disease in 2009, alerting eastern State plant health regulators and forest managers to the disease. We produced the first national Pest Alert, which facilitated discovery of the disease in Knoxville, then issued a Pest Alert after the disease was found in the Eastern United States. The Forest Service is also sharing talking points and management recommendations with State forestry, agriculture, university, and other partners.

Woody Biomass, An Abundant Resource for Energy and Other Uses

The Forest Service's national *Woody Biomass Utilization Strategy* promotes sustainability, entrepreneurship, and science-based information and technology as tools for increasing the use of woody biomass for energy. A biomass coordinator delivers technical and financial assistance across several program areas. The WERC grant program provides project funds.

The program is assisting with 40 wood energy feasibility studies in 12 States and supporting 11woody biomass utilization projects in 5 States. In the *Missouri Fuels for Schools Recovery Act Project*, 13 rural schools were evaluated for conversion to wood energy systems. Six schools are implementing projects. In Pennsylvania, several multibuilding school projects are underway. Of 14 facilities evaluated near Watertown, NY, 8 are considering wood energy systems.

Corporate Partnerships

The Forest Stewardship *Corporate Partnership Initiative* is exploring new public-private partnerships for sustainable private forest land management. The initial phase states the business case for "green" partnerships, describing how they are commonly structured. Informal interviews were conducted with corporate managers at companies such as Intel, REI, and BJs Wholesale Club.

A Stewardship Project Competitive Focus Grant was awarded to a Maine pilot project to explore how NA S&P's Forest Stewardship Program can help State partners engage local businesses in landscape-scale forest planning.

Future plans include:

- Studying existing partnerships to define best practices.
- Gaining understanding of what drives corporate sustainability programs and build relationships between the Forest Service and corporate executives.
- Gaining understanding of how nongovernment organizations and foundations could be intermediaries with the private sector, building relationships with appropriate organizations.

The Stewardship Project

A 2-year NA S&PF and Northeastern Area Association of State Foresters initiative is expanding the influence and effectiveness of Forest Stewardship programs, including new ways for State and Federal agencies to cooperate on landowner assistance. The Project has a steering committee and five work groups:

Landscape Scale Stewardship Work Group: Completed the *Draft Landscape Stewardship Guidance* and a brief *Landscape Stewardship Quick Start Guide*, which offer guidance on State-level stewardship for large areas.

Communications and Marketing Work Group: Surveyed the communications capacity of each of the region's States and the District of Columbia. Awarded a contract to a social marketing consultant to aid in creating messages and tools that resonate with target audiences.

Measures and Metrics Work Group: Developed better measures for Stewardship Program outcomes to present a more accurate, compelling picture of how the program makes a difference.

Engaging Communities Work Group: Compiled examples of successful community engagement in Forest Stewardship and is reviewing literature on public engagement measures.

Financial Viability Work Group: Outlined tax reform policy recommendations for State Foresters' consideration. It also created a 1-year action plan to establish corporate partnerships.

In 2010, eight grants were awarded to State and university partners based on project findings. NA S&PF will assist grantees and share lessons learned, outcomes, and new technology.

2010 Statewide Forest Resource Assessments and Strategies

The Farm Bill requires each State to complete a *Statewide Forest Resource Assessment and Strategy* (often called a *State Action Plan*) to be eligible for Cooperative Forestry Assistance Act funding. By gathering comparable information during similar processes, the U.S. Forest Service and States can better identify and address shared forest resource priorities.

All of the region's 20 State forestry agencies and the District of Columbia completed their State Action Plans in 2010. Each branch of the Forest Service provided assistance. The NA S&PF assisted States with meeting the Federal requirements and worked with the Northeastern Area Association of State Foresters to provide regional guidance.

Partners are currently working to (1) use S&PF Program funding and assistance to help implement State strategies; (2) decide how to fill data gaps during future assessments; and (3) pursue landscape-scale conservation.

Urban and Community Forestry in the Northeast and New York

Roughly 8.4 million people live in New York City, where tree cover averages just 24 percent. U.S. Forest Service studies show that every $1 spent on city trees yields $5.60 in annual benefits. In 2008, Mayor Bloomberg announced goals to plant 1 million trees and to reach 30 percent tree cover by 2030.

Since the announcement, the New York City Parks Department has planted nearly 400,000 trees. U.S. Forest Service funds supported plantings at 50 sites dedicated to the victims of terrorism, their families, communities, and the nation. Trees and vegetation were planted specifically to reduce storm water runoff into the New York–New Jersey harbor.

Chesapeake Bay Watershed Forestry

As the Chesapeake Bay region loses an average of 100 acres of forest to development every day, the Bay's health continues to decline. States have worked diligently to reduce pollution and to promote healthy forests to protect waterways. In 2010, the *Strategy for Protecting and Restoring the Chesapeake Bay Watershed and 2011 Action Plan* was completed, launching a new era of Federal leadership, action, and accountability.

The Forest Service has been working with States and others for more than 20 years to identify and assist in priority areas where forest practices can most benefit water quality. The Forest Service also collects and interprets data, and quantifies the effects of forest practices on water quality. *The State of Chesapeake Forests* report contains more than a decade of data from public and private sources.

Partners restored more than 6,900 miles of forest buffer between 1996 and the end of Fiscal Year 2009. Recent project examples include the Bay Bank, which links landowners with conservation resources, and LandServer, a Web-based conservation assessment tool.

Upper Mississippi Forest Partnership

Dams and levees in the Upper Mississippi have altered the forests that once thrived along the river. Many bird populations are in decline. The loss of forest buffers is affecting water quality all the way to the Gulf of Mexico, where an area of low oxygen in the water is threatening sea life. A substantial amount of the nitrogen and phosphorus that cause the problem comes from activities in the Upper Mississippi.

The Upper Mississippi Forest Partnership is improving water quality and migratory bird habitat by restoring forests and improving existing forests. The National Fish and Wildlife Foundation awarded $223,000 through the Upper Mississippi Watershed Fund, matched by another $632,000. The NA S&PF has supported several projects through its competitive resource allocation process and the Forest Stewardship Program.

Success Stories

Success stories offer a snapshot that shows how NA S&PF technical and financial assistance improves forest health and enhances communities. Some describe local projects, while others are regional. Following is a short summary of each success story published in Fiscal Year 2011. The grants, projects, and events described may have occurred in the year before their publication.

Ecosystem Restoration: Southeastern Massachusetts Hazardous Fuels Mitigation

Aided by American Recovery and Reinvestment Act funds, the Massachusetts Department of Conservation and Recreation and The Nature Conservancy trained municipal fire staff, stepped up fire planning in high-risk areas, and assisted with the development of Community Wildfire Protection Plans. A total of 43 jobs were either created or retained as workers assisted 48 at-risk communities.

Ohio's Carroll County Volunteer Fire Department Converts Military Truck

A lack of equipment designed for wildland fires hampers firefighting and places firefighters at greater personal risk. The Department of Defense Firefighter Property Program and the Forest Service Federal Excess Personal Property Program offer excess military trucks to States for conversion to wildland fire engines. The Carroll County, OH, Volunteer Fire Department acquired and retrofitted a four-wheel-drive pickup truck for just $5,000.

Maine Defensible Space Chipping Program

Two-thirds of Maine's population lives in areas at elevated risk of wildfires. The Maine Forest Service used National Fire Plan Funds to launch a Defensible Space Chipping Program. Excess fuels are removed, chipped, and then used for community projects or converted to wood pellet fuel. More than 300 homeowners have increased defensible space, over 900 acres have been treated, and 368 tons of hazardous fuels have been removed.

Emerald Ash Borer Web Site Provides Wealth of Timely Information

The U.S. Forest Service and Michigan State University spearheaded development of a Web site called www.emeraldashborer.info, currently among the top three search engine results. Contributors include Federal and State agencies, universities, researchers, the green industry, and the public. States and others can link to the site, which limits duplication of effort, saves time and money, and delivers reliable, up-to-date information.

Tree Climbing Training in Hardwoods: Innovative Program Helps Monitor Urban Forest Health Conditions

When the Asian longhorned beetle, which mainly attacks and kills maples, appeared in New York and Chicago, it created an urgent need for early detection. Tree climbers, by far the best early detection method, normally work in conifer trees. The NA S&PF began training Forest Service climbers for work in hardwoods. Experienced Forest Service and State forestry agency climbers are now available across the region and assist with many types of forest health projects.

Koochiching Forest Legacy Project

When Boise Cascade sold all 309,000 acres of its Minnesota timberlands, citizens realized that open space, jobs, public access, wildlife habitat, and other values were at risk. The State used $9.9 million in Federal Forest Legacy funds, $9.7 million in State funds, and $5.4 million in private funds to purchase a conservation easement on more than 127,000 acres.

LaBarque Creek Watershed Project: First Forest Legacy Project in Missouri

The 13-square-mile LaBarque Creek watershed lies in a rapidly developing area near St. Louis. The creek feeds the Meramec River, which supplies drinking water for 20 percent of the city. The 154-acre Creek Forest Legacy tract protects both banks of the creek along two-thirds of a mile, which will help to maintain water quality and aquatic habitat. The tract is adjacent to and is managed as part of the Young Conservation Area.

Greening Forest Service Offices in the Northeast and Midwest: Microgrants Fund Sustainable Operations at 18 Locations

Each NA S&PF and Northern Research Station facility received a $200 challenge to make their operations more sustainable. Several locations added a similar amount of local operating funds. Planet-saving projects include replacement of old refrigerators with energy star models; installation of motion-sensor light switches, programmable thermostats, and digital timers; landscaping to cut the amount of grass that needs to be mowed and watered; and installation of water filters to reduce the use of plastic water bottles.

Upper Mississippi River Watershed: Bottomland Ecosystem Restoration Conference

Bottomland forests—where the land and water meet—and associated wetlands are not renewing themselves, and are being degraded by invasive species. The NA S&PF sponsored the first Bottomland Ecosystem Restoration Conference, where more than 30 experts shared information with 160 attendees. Three-quarters of the attendees surveyed were interested in a follow-up conference on floods and floodplain management, 65 percent were interested in river floodplain research, and more than half would attend a follow-up conference on bottomlands.

Crawford Central School District Woody Biomass Project

The Northeastern Area State and Private Forestry's Woody Biomass Technical Assistance Team proposed a central heating plant to serve three Crawford County, PA, public facilities. The new plant will replace fossil fuels with locally produced renew¬able energy and will cut energy costs by about one third. Funding includes a Pennsylvania Department of Environmental Protection Energy Harvest American Recovery and Reinvestment Act Grant, an NA S&PF Woody Biomass Utilization Grant, and a Pennsylvania Alternative and Clean Energy Grant, with the balance financed by a bond issue.

National Skills Standards for Woodworkers

Wood industries often lack skilled employees to produce quality products. The NA S&PF Wood Education and Resource Center granted funds to the Architectural Woodwork Institute to develop the Woodwork Career Alliance. A partnership among national and regional industry associations, educators, and others, the alliance developed Skill Standards for more than 50 tools and machines and 150 operations. The industry now has unified, detailed operational standards to use to train workers, measure performance, and evaluate results.

WERC Woody Biomass Technical Assistance Team

Woody biomass is a clean, renewable, cost-effective energy source *if* systems are properly designed and operated. Amid rising energy prices, the NA S&PF Wood Education and Resource Center (WERC) began offering technical assistance to facilities considering conversions to wood energy, since few consulting firms provide this service. The Woody Biomass Technical Assistance Team, a partnership between WERC and three private firms, has analyzed over 100 facilities. More than 50 can use woody biomass to reduce their fuel costs and carbon footprint.

Veterans Administration personnel and the WERC Technical Assistance Team visit the wood-fired combined heating and power system at the Lockheed Martin System Integration facility in Owego, NY.

Appendix

Northeastern Area State and Private Forestry

Investment in State and Private Forestry Programs Fiscal Years 2009–2011

(Dollars in thousands)

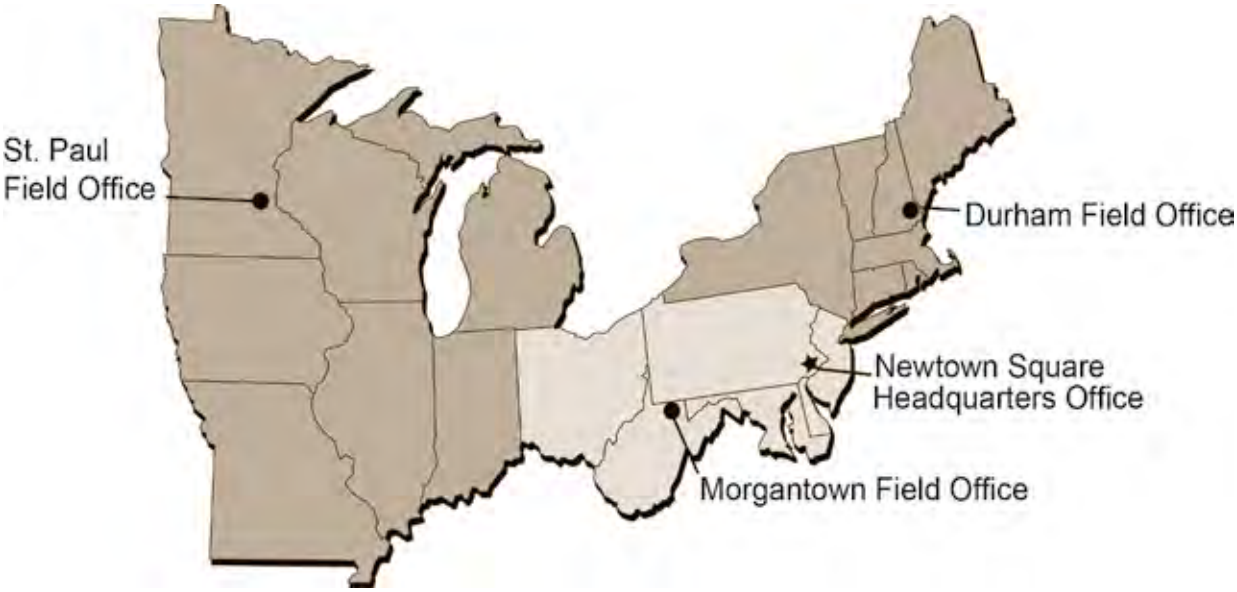
Program	FY 2009	FY 2010	FY 2011
Forest Health Management			
Forest Health Management-Federal lands	11,267	11,665	11,862
Forest Health Management- Cooperative Lands	19,145	18,596	16,567
Subtotal Forest Health	**30,412**	**30,261**	**28,429**
Cooperative Fire Protection			
State Fire Assistance	7,234	8,659	6,573
Volunteer Fire Assistance	2,316	2,702	2,578
National Fire Plan	10,172	11,428	14,771
Subtotal Fire	**19,722**	**22,789**	**23,922**
Cooperative Forestry			
Forest Stewardship	9,856	13,246	9,682
Urban and Community Forestry	10,893	10,212	10,655
Forest Legacy	32,293	27,294	27,153
Economic Action Programs	3,273	1,800	410
Subtotal Cooperative Forestry	**56,315**	**52,552**	**47,900**
Other			
Grey Towers	2,728	2,521	1,960
Forest Health Technology Enterprise Team	1,234	2,056	2,389
Reimbursables	961	8,126	6,631
Subtotal Other	**4,923**	**12,703**	**10,980**
Total All Programs	**$111,372**	**$118,305**	**$111,231**

Northeastern Area State and Private Forestry

Strategic Plan Goals and Objectives

Goal 1: Promote sustainable forest management	**Objective A: Conserve the biological diversity of high priority forest land at risk of conversion and fragmentation**
	Objective B: Sustain the productive capacity of privately owned forest land
	Objective C: Maintain the health and vitality of forest ecosystems at risk from potentially damaging agents
	Objective D: Protect and enhance the health of watersheds
Goal 2: Enhance the capacity of forests to provide public benefits	**Objective A: Promote and encourage the viability of forest-based industries**
	Objective B: Help the Northeast and Midwest to meet their needs for renewable energy, to reduce greenhouse gases, and to conserve energy
	Objective C: Help communities at risk from wildland fire protect lives, property and natural resources
	Objective D: Maintain and enhance the benefits communities within metropolitan areas derive from their forests and trees

Northeastern Area State and Private Forestry Offices



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